

Narrative and Storyboard

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Title

The web page title will be **Makey Makey: Connecting and Coding** which will be part of the larger web site "Makey Makey: Museum Piece.

Description

This project is designed to teach students about basic computer programming as well as event triggered interactive hardware to software interfacing, as well as provide students an opportunity to independently research aspects of a chosen content area, in this case Social Studies. Furthermore, embedded in this project are Common Core aligned standards of writing, reading for information and speaking.

Objective

7th grade students will be able to create a museum style interactive object that explains a concept from Social Studies using physical materials, a micro controller, and online block style coding.

7th grade students will be able to write and record a brief and accurate synopsis of a concept from the Social Studies content using Google Docs and Chromebook supported recording software and hardware.

7th grade students will be able to collaborate together in creating their projects by using conflict resolution techniques and team building strategies.

Steps

Before this stage of the project, students will have already researched their topics, composed a short synopsis about their topic (about 45 seconds when read out loud) recorded their synopsis into an audio file, built the physical museum piece, and selected visual materials that are going to be used in their projects. This step has them combining them all using the Makey Makey microcontroller to make the piece interactive.

Step one:

- Connect alligator clips to the Makey Makey board, either directly or with jumper wire
 - Picture of how alligator clips link to the board, bot directly and with jumper wires
- Note the connectors action on the board and where they are leading
 - Close ups of identification markers on the Makey Makey Board
- Connect the other end of the alligator clip to the presentation board
 - Clip to bottom of presentation board sprites

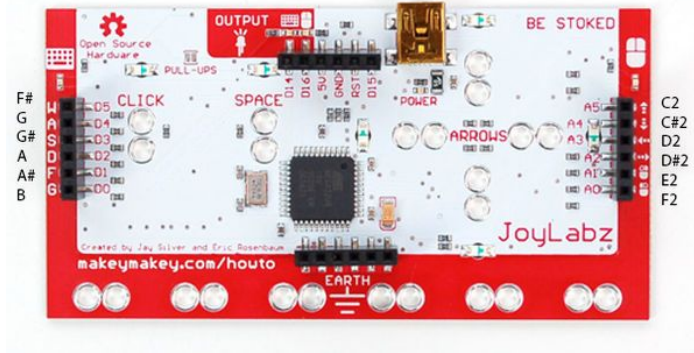
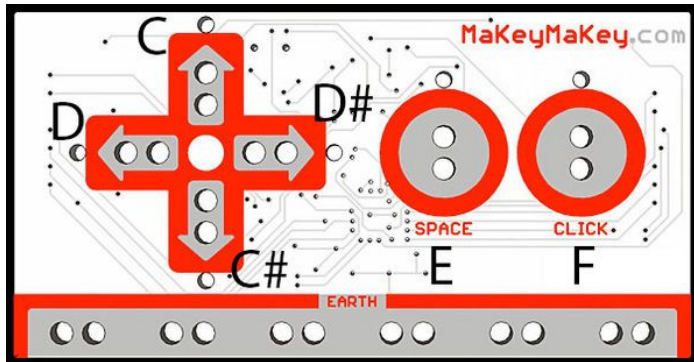
Step two

- Sign up for Scratch
 - Ensure they verify account
- Coding Scratch interface
 - (Enable Flash)
 - Event control
 - Associate event drop down to associated presentation sprite
 - Background change
 - Sound/Speech
 - Sprite Control

Step three: Extras

- Pixlr for editing photographs

Basic Web Page Layout



[MaKey Makey Intro video](#)

Introduction to the Makey

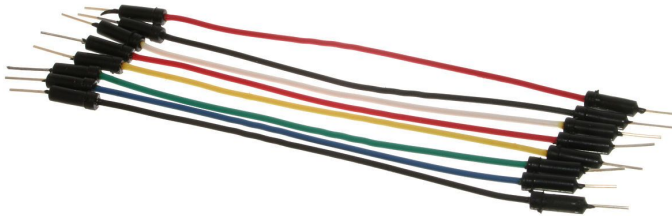
Makey

Picture of the makey Makey,
short video fun video of it being
used



Connecting alligator clips to
Makey Makey, with and without
jumper

(text note to jot down the
connection descriptors
somewhere)



[Video to linking clips to makey makey and alligator
board](#)

	<p>Sign-up or sign in to Scratch</p> <p>Be sure to confirm your email</p> <p>Link to Scratch Website www.scratch.mit.com</p>
<p>Video on how to block code the piece (not made yet)</p>	<ul style="list-style-type: none"> -Enabling Flash -Event Control -Background change -Sound and Speech Control -Sprite Control
 <p>Getting Started with Pixlr</p> <p>Removing Background from picture</p>	<p>This can be used to change your backgrounds, create your own custom sprite and any other image changes you want to make</p>

References

Lee, W. W., & Owens, D. L. (2004). *Multimedia-based instructional design: computer-based training, web-based training, distance broadcast training, performance-based solutions*. John Wiley & Sons.

Saavedra, A., & Opfer, V. (2012). Learning 21st-century skills requires 21st-century teaching. *The Phi Delta Kappan*, 94(2), 8-13. Retrieved from <http://www.jstor.org/stable/41763587>

Wilson, B. (2004). Designing E-Learning Environments for Flexible Activity and Instruction. *Educational Technology Research and Development*, 52(4), 77-84. Retrieved from <http://www.jstor.org/stable/30220406>